

**Notice of Allowability**

Application No.

10/042,240

Applicant(s)

BAE ET AL

Examiner

Tuan V Ho

Art Unit

2615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments filed 10/1/03.
2. ☒ The allowed claim(s) is/are 12-20 (renumbered as 1-9 respectively).
3. ☒ The drawings filed on 11 January 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/1/02, 7/24/03 and 10/01/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other copies of drawing correction.

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Oram on 3/7/05.

The application has been amended as follows:

Figs. 7 and 8 are labeled as "Prior Art".

2. Claims 12-20 are allowed.

The prior art of record fails to suggest or disclose an image sensor characterized in that at a time of reset of the photoelectric transducer, a differential amplifier is constructed in which an inverting input terminal is the gate of the source follower transistor, and a noninverting input terminal is a gate of a first differential transistor to which a constant voltage is applied, and the one end of the photoelectric transducer is kept the constant voltage by feeding back an output of the differential amplifier to the inverting input terminal.

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Merill (US 2002/0036700 A1) discloses an active pixel sensor with noise cancellation circuit.

Kozlowski et al (US 6,493,030) discloses low-noise active pixel sensor that a reset supply circuit.


Hynecek (US 6,243,434) discloses an imafe sensor that includes a low-noise high sensitivity charge detection amplifier.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN HO whose telephone number is (703) 272-7365. The examiner can normally be reached on Mon-Fri from 7AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Thai Tran can be reached on (703) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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TUAN HO

Primary Examiner

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